

IFW/2621

PTO/SB/21 (09-04)

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|---|----------------------|------------------------|-----------------------|
| TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 10/523,499 | |
| | Filing Date | February 1, 2005 | |
| | First Named Inventor | Michael Elashoff | |
| | Art Unit | 2621 | |
| | Examiner Name | Unknown | |
| Total Number of Pages in This Submission | 8 | Attorney Docket Number | 4033-US (111944-0061) |

| ENCLOSURES (Check all that apply) | | |
|---|--|---|
| <input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Request for Corrected Filing Receipt; Corrected Copy of Filing Receipt; First Pg. of published PCT application; Appointment of Agent; Postcard |
| Remarks | | |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | | | |
|--|--|----------|--------|
| Firm Name | Procopio, Cory, Hargreaves & Savitch LLP | | |
| Signature | | | |
| Printed name | Eleanor M. Musick | | |
| Date | July 13, 2005 | Reg. No. | 35,623 |

| CERTIFICATE OF TRANSMISSION/MAILING | | | |
|---|-------------------|------|---------------|
| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. | | | |
| Signature | | | |
| Typed or printed name | Eleanor M. Musick | Date | July 13, 2005 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Michael Elashoff, et al.

Serial No.: 10/523,499

Filed: February 1, 2005

**For: METHOD AND SYSTEM FOR
MANAGING AND QUERYING
GENE EXPRESSION DATA
ACCORDING TO QUALITY**

Group Art Unit: 2621

Examiner: Unknown

REQUEST FOR CORRECTED FILING RECEIPT

Commissioner for Patents
Washington, D.C. 20231
Attn: Office of Initial Patent Examinations
Filing Receipt Corrections

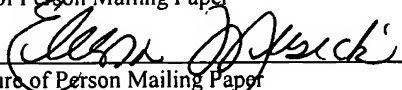
Sir/Madam:

This is a formal Request for Corrected Filing Receipt. The Filing Receipt should be corrected as to the Attorneys for Applicants, and to include the inventor information for inventor Peter Lauren. A copy of the filing receipt, marked in red to show changes, is attached along with a copy of the first page of the published PCT application listing Peter Lauren as an inventor.

CERTIFICATE OF MAILING (37 C.F.R. §1.8a)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as First Class Mail in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231.

July 13, 2005
Date of Deposit

Eleanor M. Musick
Name of Person Mailing Paper

Signature of Person Mailing Paper

Also enclosed is a copy of the Appointment of Agent from the PCT application, which was executed subsequent to the execution of the Power of Attorney in the combined declaration, revoking all prior appointments of agents and designating the undersigned as Applicants' agent. Accordingly, the filing receipt should reflect this designation as indicated on the marked-up filing receipt.

There is no fee believed to be due in connection with this Request, however, if any fee is due, the Commissioner is authorized to charge Procopio's Deposit Account No. 50-2075 for the appropriate amount.

Respectfully submitted,

Dated: July 13, 2005

By:



Eleanor M. Musick

Reg. No. 35,623

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530 B Street, Suite 2100
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Docket No. 4033-US (111944-0061)



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| APPL NO. | FILING OR 371 (c) DATE | ART UNIT | FIL FEE REC'D | ATTY. DOCKET NO | DRAWINGS | TOT CLMS | IND CLMS |
|------------|---------------------------|----------|---------------|----------------------|----------|----------|----------|
| 10/523,499 | 02/01/2005 | 2621 | 800 | 4033US (111944-0061) | 16 | 26 | 6 |

CONFIRMATION NO. 3394

FILING RECEIPT

OC000000016024045

~~23370~~

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Date Mailed: 05/16/2005

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Michael Elashoff, Germantown, MD;
 Chris Alvares, Potomac, MD;
 Peter Lauren, Columbia, MD

Power of Attorney:

Eleanor Musick-35623

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/US03/24160 08/01/2003
 which claims benefit of 60/399,727 08/01/2002

Foreign Applications

Projected Publication Date: 08/25/2005

Non-Publication Request: No

Early Publication Request: No

** SMALL ENTITY **

Title

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 April 2004 (15.04.2004)

PCT

(10) International Publication Number
WO 2004/031885 A2

(51) International Patent Classification⁷: **G06F**
(21) International Application Number:
PCT/US2003/024160
(22) International Filing Date: 1 August 2003 (01.08.2003)
(25) Filing Language: English
(26) Publication Language: English
(30) Priority Data:
60/399,727 1 August 2002 (01.08.2002) US
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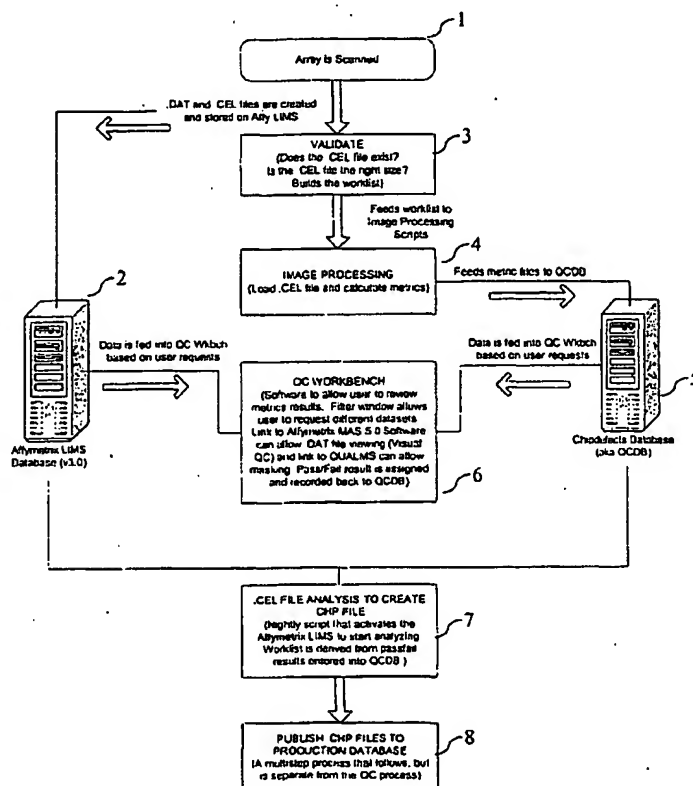
(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(72) Inventors; and
(75) Inventors/Applicants (for US only): **ELASHOFF,**

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW);

[Continued on next page]

(54) Title: **METHOD AND SYSTEM FOR MANAGING AND QUERYING GENE EXPRESSION DATA ACCORDING TO
QUALITY**



(57) Abstract: An automated system and method are provided for analyzing gene expression data obtained from a plurality of microarrays having mismatch (MM) probe pairs and perfect match (PM) probe pairs. Image data for a plurality of scanned microarrays is stored in a database along with a set of microarray parameters which includes one or more image processing metrics for quality control of the microarray and a pass/fail status of the microarray as determined by these metrics. The user can search the database records according to one or more microarray parameters. The image processing metrics include algorithms for removing local background effects from the probe measurements by determining a model for estimated background using PM probe values. Other image processing metrics utilize a modified Robust Multi-array Averaging (RMA) applied to PM probes to assign weights to probes for determining overall quality of a microarray.



GENERAL APPOINTMENT OF AGENT OR COMMON REPRESENTATIVE

Sir:

Effective today, the undersigned applicant revokes all prior appointments of agents or representatives, and appoints:

Eleanor M. Musick, Reg. No. 35,623; Stephen C. Beuerle, Reg. No. 38,380; Kamwah Li, Reg. No. 34,211; Harris F. Brotman, Reg. No. 35,461; Troy M. Schmelzer, Reg. No. 36,667; Patric J. Rawlins Reg. No. 47,887; and Kathleen Pasulka, Reg. No. 35,652.

to represent me as applicant, to act for me in all proceedings, to grant further powers of substitution to attorneys in countries other than the United States, and to do all things necessary or appropriate therefor, before the competent International Authorities in connection with the international patent application in respect of the invention entitled:

**METHOD AND SYSTEM FOR MANAGING AND QUERYING GENE
EXPRESSION DATA ACCORDING TO QUALITY**

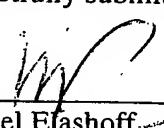
filed with the United States Patent and trademark Office as the receiving Office under the provisions of the PATENT COOPERATION TREATY, corresponding to WIPO Application No. PCT/US03/24160 filed 01 August 2003.

Please direct all correspondence to the attention of:

Eleanor M. Musick
PROCOPIO, CORY, HARGREAVES & SAVITCH LLP
530 B Street, Suite 2100
San Diego, CA 92101-4469
Tel: (760) 931-9700
Fax: (760) 931-1155

Respectfully submitted,

Dated: May 19, 2004


Michael Elashoff

Dated: May __, 2004

Chris Alvarez

Dated: May __, 2004

Peter Lauren



GENERAL APPOINTMENT OF AGENT OR COMMON REPRESENTATIVE

Effective today, the undersigned applicant revokes all prior appointments of agents or representatives, and appoints:

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Respectfully submitted,

Dated: May __, 2004

Dated: May 4, 2004

Dated: May __, 2004

Michael Elashoff


Chris Alvarez

Peter Lauren



GENERAL APPOINTMENT OF AGENT OR COMMON REPRESENTATIVE

Sir:

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Kamwah Li, Reg. No. 34,211; Harris F. Brotman, Reg. No. 35,461; Troy M.
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Please direct all correspondence to the attention of:

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Respectfully submitted,

Dated: May __, 2004

Michael Elashoff

Dated: May __, 2004

Chris Alvarez

Dated: May 18, 2004



Peter Lauren